b) Amendments to the Claims

A detailed listing of the claims is provided herewith.

1. (Currently Amended) A method for producing a ~~mesostructred film~~ mesostructured film comprising the steps of:

preparing a reaction solution containing a tin-containing compound ~~precursor material~~ for mesostructured ~~mesostructred~~ film which contains a tin ~~metal~~ oxide, and ~~an amphiphilic material~~ a surfactant;

applying the reaction solution onto a substrate having a capability of orienting an aggregate of the surfactant ~~amphiphilic material~~ in a predetermined direction; and

forming the ~~mesostructred~~ mesostructured film having a plurality of the aggregates of the ~~amphiphilic material~~ surfactant oriented in the predetermined direction while holding the substrate onto which the reaction solution has been applied in a water vapor-containing atmosphere having a relative humidity from 40% to 100%.

2. (Cancelled)

3. (Currently Amended) A method for producing a ~~mesostructred~~ mesostructured film according to claim 1, wherein the ~~precursor material~~ tin-containing compound is a ~~metal~~ tin chloride.

4. (Cancelled)

5. (Currently Amended) A method for producing a mesostructured ~~mesostructred~~ film according to claim 1, wherein the step of forming the mesostructured ~~mesostructred~~ film having a plurality of aggregates of the ~~amphiphilic material~~ surfactant oriented in the predetermined direction is performed at a temperature of 100ºC or less.

6. (Cancelled)

7. (Withdrawn) A porous film on a substrate, comprising a plurality of tube-shaped pores oriented in a predetermined direction and containing a metal oxide in a pore wall of the porous film.

8. (Withdrawn) A porous film according to claim 7, the porous film comprising tin oxide in the pore wall.

9. (Withdrawn) A porous film according to claim 7, wherein the tube-shaped pores are mesopores each having a pore diameter of from 2 nm to 50 nm.

10. (Withdrawn) A porous film according to claim 7, wherein the pores hold an aggregate of an amphiphilic material.

11. (Withdrawn) A porous film according to claim 7, wherein at least 60% of the tube-shaped pores are oriented within a range of -40° to +40° in an orientation direction distribution as measured by an in-plane X- ray diffraction analysis.

12. (Withdrawn) A porous film according to claim 7, wherein the substrate has a capability of orienting the aggregate of the amphiphilic material in the predetermined direction.

13. (Withdrawn) A porous film according to claim 12, wherein the substrate having the capability of orienting the aggregate of the amphiphilic material in the predetermined direction is a substrate on the surface of which a polymer compound film provided with anisotropy has been formed.

14. (Withdrawn) A porous film according to claim 12, wherein the substrate having the capability of orienting the aggregate of the amphiphilic material in the predetermined direction is a monocrystal substrate having such an orientation that an atomic arrangement at a surface of the substrate has two-fold symmetry.

15. (Withdrawn) A porous film according to claim 14, wherein the monocrystal substrate is of the (110) surface of silicon monocrystal.

16. (Withdrawn) A porous film according to claim 12, wherein the substrate having the capability of orienting the aggregate of the amphiphilic material in the predetermined direction is a substrate on the surface of which a polymer compound film provided with anisotropy or a Langmuir-Blodgett film of a polymer compound has been formed.

17. (Currently Amended) A method for producing a porous film comprising the steps of:

preparing a reaction solution containing a tin-containing compound ~~precursor material~~ for a porous material which contains a ~~metal~~ tin oxide, and ~~an amphiphilic material~~ a surfactant;

applying the reaction solution onto a substrate having a capability of orienting an aggregate of the surfactant ~~amphiphilic material~~ in a predetermined direction;

forming the porous material having a plurality of the aggregates of the ~~amphiphilic material~~ surfactant oriented in the predetermined direction while holding the substrate onto which the reaction solution has been applied in a water vapor-containing atmosphere having a relative humidity from 40% to 100%; and

removing the ~~amphiphilic material~~ surfactant to form a pore.